

WHAT IS CLAIMED IS:

1. A reproducing/recording apparatus comprising:
an apparatus body having a disk gate for inserting and ejecting a disk;
a case provided inside the apparatus body for accommodating the disk;
5 a recording/reproducing mechanism for recording on and reproducing from the
disk accommodated in the case; and
a loading mechanism for advancing and retracting the case between a position
where the disk faces the recording/reproducing mechanism and a position near the disk
gate, the loading mechanism including a motor, a gear mechanism coupled with the motor,
10 and a rack coupled with the gear mechanism and provided along an advancement and
retraction direction of the case,
wherein a groove is formed on at least one of the rack and the case for allowing a
relative movement of the rack and the case along the advancement and retraction direction,
and
15 wherein a start mechanism is formed between the case and the gear mechanism
for starting rotation of the motor when the case advances to a predetermined position.
2. The reproducing/recording apparatus according to claim 1, wherein the case
includes a hold assembly on which an arm for holding an outer circumferential edge of the
disk is provided and a base plate on which the hold assembly is provided.
- 20 3. The reproducing/recording apparatus according to claim 2, further comprising an
arm lock mechanism that locks the arm when the arm holds the disk.
4. The reproducing/recording apparatus according to claim 3, further comprising an
arm unlock mechanism that releases the lock of the arm lock mechanism.
5. The reproducing/recording apparatus according to claim 2, wherein the base plate
25 has a clamber for holding the disk and a clamber hold mechanism for moving the clamber
toward the disk when the base plate advances to the recording/reproducing mechanism
and for moving the clamber away from the disk when the base plate retracts toward the
disk gate.
6. The reproducing/recording apparatus according to claim 1, wherein the apparatus

body has a shutter for covering the disk gate when the recording/reproduction mechanism is in operation and for opening the disk gate when the recording/reproducing mechanism is not in operation, the shutter being coupled through a coupling mechanism with a switch lever that stops driving the loading mechanism and starts driving the recording/reproducing mechanism.

7. The reproducing/recording apparatus according to claim 2, further comprising:
a plurality of the arms, one of which being an eject arm for pushing out the disk toward the disk gate; and

a dumper mechanism for reducing push-out force of the disk pushed out by the eject arm.

8. The reproducing/recording apparatus according to claim 2, further comprising a manual eject mechanism for manually ejecting the hold assembly, the manual eject mechanism having an eject member that ejects the disk by a plurality of pushing operations.

9. The reproducing/recording apparatus according to claim 8, further comprising a disk lock mechanism for locking the disk when the eject member is manually pushed.

10. The reproducing/recording apparatus according to claim 8, wherein the manual eject mechanism includes a one-way clutch that transfers the drive of the eject member only in a direction in which the eject member is manually pushed.

11. The reproducing/recording apparatus according to claim 2, wherein the recording/reproducing mechanism is attached to the apparatus body in a manner that an end thereof is turnably supported while the other end is swingable toward and away from the disk accommodated in the hold assembly.